	Application No.	Applicant(s)
Notice of Allowability	09/751,930	WANG ET AL.
	Examiner	Art Unit
	CHAMELI C DAS	2122
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate communated in the communate communate in the community of the c	a the correspondence address this application. If not included nication will be mailed in due course. THIS
1. This communication is responsive to the amendment filed	<u>on 9/13/04.</u> .	
2. 🖾 The allowed claim(s) is/are 31-46 (newly numbered claims	are (1-16).	
3. $\boxtimes$ The drawings filed on <u>29 December 2000</u> are accepted by	the Examiner.	
4. ☑ Acknowledgment is made of a claim for foreign priority ur  a) ☐ All b) ☐ Some* c) ☐ None of the:  1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:	been received. been received in Application cuments have been received	No in this national stage application from the
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	IENT of this application.	
5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
6. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.	
(a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1)  hereto or 2)  to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	.84(c)) should be written on the he header according to 37 CFR	e drawings in the front (not the back) of
7. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT		
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date	6. ☑ Interview Sur Paper No./N 8), 7. ☐ Examiner's A	lail Date 11/4/6.4 mendment/Comment tatement of Reasons for Allowance

This action is in response to the amendment filed on 9/13/20004. 1.

2. Claims 1-30 have been canceled.

3. Claims 35-46 have been added.

Claims 31-46 have been allowed. 4.

## **EXAMINER'S AMENDMENT**

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Gregg Peacock, applicant's attorney on 11/05/04.

The application has been amended as follows:

On the cover page of the specification, in the list of Inventors, after "Neil Chazin" --John Shen-- has been inserted.

In claims:

In claim 42, line 1, "The computer-readable medium of claim 0" should be replaced by -- The computer-readable medium of claim 41 --.

In claim 43, line 1, "The computer-readable medium of claim 0" should be replaced by -- The computer-readable medium of claim 41 --.

In claim 44, line 1, "The computer-readable medium of claim 0" should be replaced by -- The computer-readable medium of claim 41 --.

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In claim 45, line 1, "The computer-readable medium of claim 0" should be replaced by -- The computer-readable medium of claim 41 --.

In claim 46, line 1, "The computer-readable medium of claim 0" should be replaced by -- The computer-readable medium of claim 41 --.

## **REASON FOR ALLOWANCE**

6. The following is an examiner's statement of reason for allowance:

The cited prior art taken alone or in combination fail to teach, in combination with the other claimed limitations, a system comprising: a h-flow pipeline to execute h-flow code related to the associated target if the trigger is satisfied during execution of the number of processor instructions, wherein the h-flow pipeline is to modify one of the number of microarchitectural states based on execution of the h-flow code, as recited in the independent claims 31, 35 and 41.

## Conclusion

7. The prior art made or record and not relied upon is considered pertinent to applicant's disclosure.

TITLE: Combined branch prediction and cache prefetch in a microprocessor, US 6119222 A

TITLE: Method and apparatus for annotating operands in a computer system with source instruction identifiers, US 5974538 A

TITLE: Inspection method and apparatus for the inspection of either random or repeating patterns, US 5537669 A

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TITLE: Link time optimization via dead code elimination, code motion, code partitioning, code grouping, loop analysis with code motion, loop invariant analysis and active variable to register

analysis, US 5999737 A

TITLE: Instruction issue logic for high-performance, interruptable pipelined processor, author:

Sohi et al, ACM, 1987.

TITLE: Synthesis of Pipelined Instruction Set processors, author: Cloutier et al, ACM, 1993.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chameli Das whose telephone number is 571-272-2696.

The examiner can normally be reached on Monday-Friday from 7:00 A.M. to 3:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Tuan Dam can be reached at 571-272-2695. The fax number for this group is (703) 872-9306.

An inquiry of general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-9600.

CHAMELI C. DAS